

SPACE, STAFF, STUFF

Identifying Your Community's Resources



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Space, Staff, Stuff: Identifying Your Community's Resources

Overview

Space, Staff, Stuff: Identifying Your Community's Resources (hereafter referred to as *Space, Staff, Stuff*) is a customizable tool for community planners. This tool helps planners identify their community organizations' roles, responsibilities, and resources and determine potential gaps in their all-hazards planning efforts. It is designed to benefit any community regardless of demographics, infrastructure, current levels of planning, or availability of public health and health care resources.

Space, Staff, Stuff addresses the following Public Health Emergency Preparedness (PHEP) Capabilities¹:

- Capability 1: Community Preparedness
- Capability 6: Information Sharing
- Capability 8: Medical Countermeasures Dispensing
- Capability 10: Medical Surge
- Capability 15: Volunteer Management

History and Background

From 2008–2015, the Centers for Disease Control and Prevention (CDC) Community and Health Systems Team (CHST) (formerly known as the Healthcare Preparedness Activity, HPA), in partnership with Oak Ridge Associated Universities (ORAU), conducted a series of community workshops aimed at improving health care responses during an influenza pandemic or other public health emergency. These collaborative community efforts brought together representatives from health care agencies and organizations, public health departments, emergency management agencies, and community support organizations to focus on health care surge in frontier, rural, and urban settings.²

CDC-HPA observed that many communities' resources were limited during a public health emergency. Moreover, CDC-HPA observed that many of these communities had not identified resources among organizations not previously involved in preparedness planning. In particular, many communities had not identified resources in non-health care related organizations that may be able to support a response, such as schools, faith-based organizations, and businesses. As a result, CDC-HPA and ORAU developed a workshop resource activity to identify these unknown resources. This workshop resource activity is the foundation for *Space, Staff, Stuff*.

¹ Centers for Disease Control and Prevention (CDC). (2018). *Public health emergency preparedness and response capabilities*. Atlanta, GA: U.S. Department of Health and Human Services. Available at <https://www.cdc.gov/cpr/readiness/capabilities.htm> (last accessed March 6, 2019).

² Many planning tools and documents were developed from these workshops, and can be found on the CHST website at <https://www.cdc.gov/cpr/readiness/healthcare/planning.htm> (last accessed March 6, 2018).

Original Resource Activity

CDC-HPA and ORAU first used the *Resource Activity* in 2008 with Peoria Region West, Illinois, during the *Regional Workshop on Community Partnerships for Pandemic Influenza Planning*. During the workshop, participants discussed various types of resources they would need to respond to a surge in ill patients in the community. In addition to medical resources, participants also discussed nonmedical resources, such as vehicles for transporting supplies and space for storing them.

Participants worked together in small groups of similar organizations (e.g., schools, hospitals) to discuss and identify their resources and used a large poster board to visually share the information with the larger group. They first recorded their organizations' resources on Post-it® notes and placed them at the top of the board under the heading "Resources We Have." Next, participants identified the resources they could share with the community. They selected the corresponding preprinted cards (known as resource icons) and attached them to the bottom of the board under the heading "Resources We Can Share" (see Figure 1 below).



Figure 1. Original *Resource Activity* (2008)

Finally, each small group presented to the other workshop attendees on the resources they had and the resources they could share during a response. Ninety-three percent of the participants reported that they learned of new resources available within their community as a result of completing this activity. Data from the activity showed that schools, walk-in clinics, Veterans Affairs clinics, public health departments, and faith-based organizations identified the largest number of resources available to be

shared. As a result, the public health and emergency management representatives at the workshop later met with the schools and faith-based organizations representatives to identify a framework for coordinating resources during a response.

Resource Activity in 2013

In 2013, CDC-HPA and ORAU modified the *Resource Activity*, turning it into a laminated poster with preprinted icons and blank spaces for use with Howard County, Nebraska, during the *Planning Workshop for Addressing Healthcare Surge in Rural Settings*. Resources were grouped into categories (such as medical equipment and medication). Participants used dry-erase markers to indicate what resources their organizations had and could share during a public health emergency and if known, noted the quantities of each resource (see Figure 2 below).

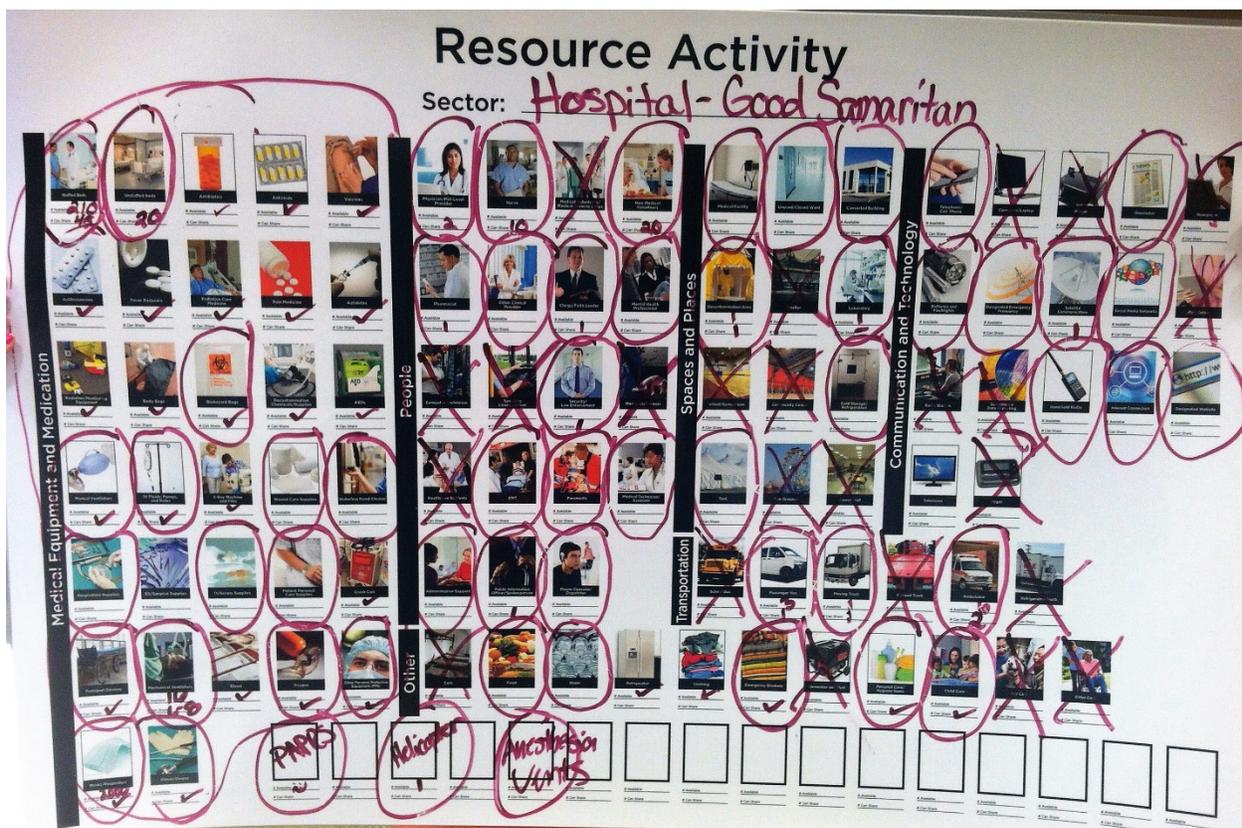


Figure 2. Resource Activity in 2013

Participants also used a *Roles and Responsibilities* worksheet to identify their organizations' roles and responsibilities and resources for day-to-day activities as well as for the response to a public health emergency (see Figure 3 on the next page).

After the activity, participants reported their findings to the larger group. As in the 2008 workshop, participants reported that the activity revealed many resources of which they were not previously aware within the community. Also, participants identified additional organizations not present at the workshop with which they wanted to follow up to identify additional available resources.

Roles and Responsibilities Worksheet

Organization Name:

Identify your organization's roles and responsibilities. Please write legibly and in complete sentences, as these worksheets will be used to inform future community planning efforts. Check the box to indicate if the role or responsibility identified pertains to current (meaning day to day) operations or operations during a public health emergency. You may check both boxes if the role or responsibility is the same in both situations.

Role/Responsibility	Current or Public Health Emergency operations
	<input type="checkbox"/> Current <input type="checkbox"/> Public Health Emergency
	<input type="checkbox"/> Current <input type="checkbox"/> Public Health Emergency
	<input type="checkbox"/> Current <input type="checkbox"/> Public Health Emergency
	<input type="checkbox"/> Current <input type="checkbox"/> Public Health Emergency
	<input type="checkbox"/> Current <input type="checkbox"/> Public Health Emergency
	<input type="checkbox"/> Current <input type="checkbox"/> Public Health Emergency

Figure 3. Roles and Responsibilities Worksheet

Resource Activity in 2015

CDC-HPA and ORAU's final community planning workshop was the 2015 Chouteau County, Montana, *Healthcare Surge Planning Workshop for Frontier Settings*. For this workshop, CDC-HPA and ORAU again modified the *Resource Activity*, creating a Microsoft Excel workbook version for the community to use prior to the workshop. This Excel version allowed the community to identify their resources over the course of several weeks, rather than through a facilitated discussion. While the workshop focused on an influenza pandemic, the community chose to approach the *Resource Activity* from an all-hazards perspective.

Organizations within the community contributed information to the workbook. Each organization identified readily available resources, the approximate number of available resources, and if they directly managed or owned the resource. Organizations also indicated if

- Other organizations relied on the resource or had access to it,

- The resource could be shared with other organizations, and
- Formal agreements were in place for each resource.

Organizations were encouraged to customize the resources listed in the workbook for their community, as well as to enter any resource-pertinent notes prior to returning it. ORAU compiled the information from the organizations and created charts depicting the availability of each resource. ORAU shared these charts with the community's planning committee and also displayed them on posters at the workshop. See Figure 4 below for an example of one of these charts.

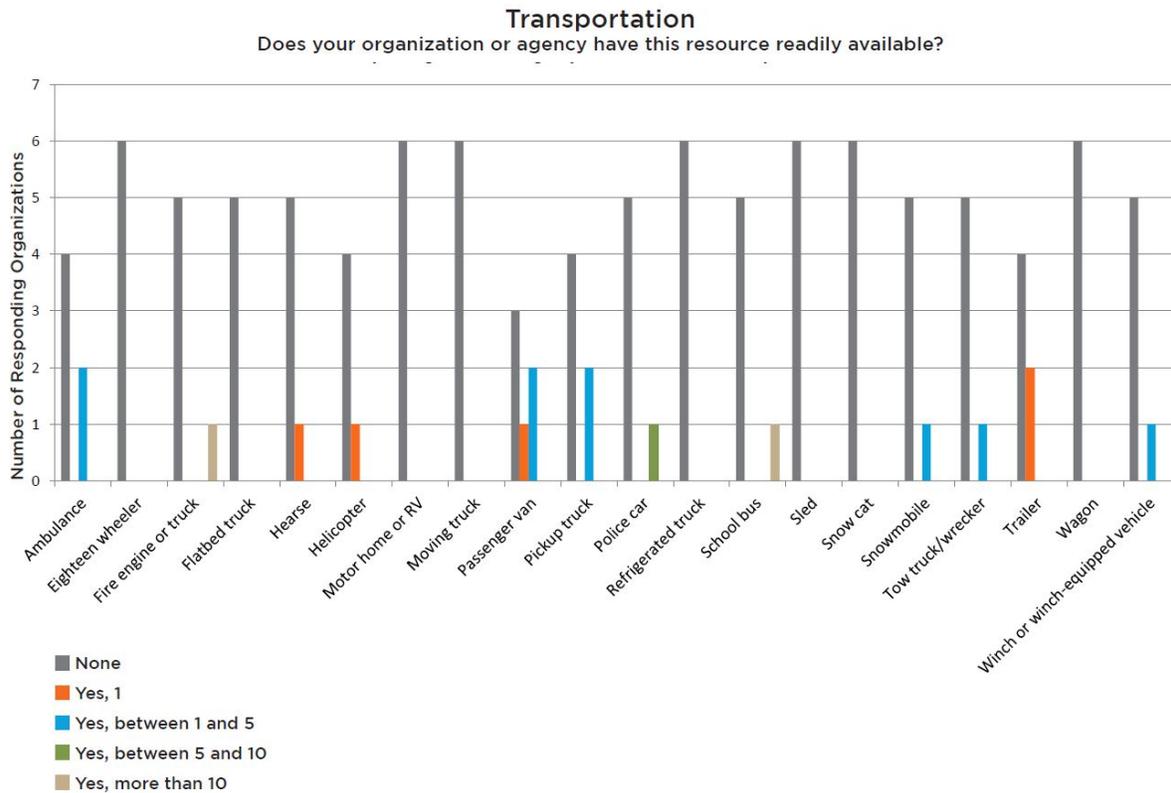


Figure 4. Example Resource Chart

Following the workshop, the community's planning committee used the *Resource Activity* to create a community-wide resource inventory and identified gaps in resource availability to address during community planning meetings. In addition, they captured information pertaining to with whom to coordinate to obtain these resources.

Benefits of This Tool

As a result of using the *Resource Activity*, many communities continued to update their community resource lists on a regular basis using an all-hazards approach. Several communities also identified resources that they would later use in nonemergency situations, such as additional event space for meetings and conferences and transportation support for home-bound individuals.

What This Tool Includes

Space, Staff, Stuff includes both a print version and an electronic version that can be customized by the user. Instructions on how to use each version are included. The print and electronic versions are intended to be used in different settings rather than in conjunction with one another.

CDC-CHST and ORAU would like to stress that the resources listed in *Space, Staff, Stuff* are not intended to be exhaustive. The listed resources are those that were commonly mentioned during the 2008–2015 community workshop series, which is the rationale for their inclusion. Users have the ability to customize the resources to their community, adding or deleting as necessary through the use of blank spaces or cells.

Print Version

The print version has three components that can be used together or separately:

- Large-scale (39" x 26") **Resource Poster**
- Small-scale (8.5"x11") version of the poster called **Resource Worksheets**
- **Roles and Responsibilities Worksheet**

The print version components are best used at an in-person meeting in which representatives from each organization are present. The print version is intended to provide a high-level overview of available and shareable resources. As a result, it also can be used during an emergency response to keep a daily log of the community's assets and responsibilities. The large-scale **Resource Poster** is ideal for this daily asset log because of its size when printed.

Resources on the **Resource Poster** and **Resource Worksheets** are separated into the following six categories:

1. Medical Equipment and Medication
2. People
3. Spaces and Places
4. Communication and Technology
5. Transportation
6. Other

How to Use the Print Version

The three print version components (**Resource Poster**, **Resource Worksheets**, and **Roles and Responsibilities Worksheet**) can be used together or separately.

The print version can be completed independently (e.g., the organization on its own), in one-on-one meetings (e.g., a community planner meeting with an organization), or by multiple organizations simultaneously (e.g., in a workshop).

Users can select either the **Resource Poster** or **Resource Worksheets** depending on their printing capabilities. The **Resource Poster** is scaled to print at 39" x 26". The **Resource Worksheets** measure 8.5" x 11", which can be printed on any standard printer.

If you choose to use the **Resource Poster**, CDC-CHST and ORAU recommend laminating it so it can be reused. Alternatively, you can use the **Resource Worksheets** to create a poster simply by arranging them together on a bulletin board.

If completing the print version with multiple organizations, seat representatives from the same organization together at a table. If similar organizations are participating (i.e., several hospitals or schools), consider seating them at the same table so they can discuss and share ideas.

To begin the activity, provide representatives of each organization a copy of either the **Resource Poster** or **Resource Worksheets**, and ask them to write their organization's name at the top.

Instruct organizational representatives to follow the four steps listed below:

1. Identify icons (i.e., images) representing resources they have available and write in the quantities (if known) of each resource on the line under the icon (Figure 6).
2. Use blank icon spaces to write in additional resources (not already represented by existing icons) and write the quantities available on the line under the icon.
3. Cross out icons representing resources they do not have available.
4. Circle the icons representing those resources that they can share with others during a public health emergency and write in the quantities they can share on the line under the icon.
5. For any icons that begin with "Other," (such as "Other PPE" or "Other Clinicians") feel free to cross out the resource name and use a more specific name. You can also use the "Fill-in" section of the worksheets or the blank boxes on the poster to list out specific resource types not reflected in the poster or worksheets.

Figure 5 provides an example of icons, and Figure 6 provides an example of how to fill out the **Resource Poster** or **Resource Worksheets**.

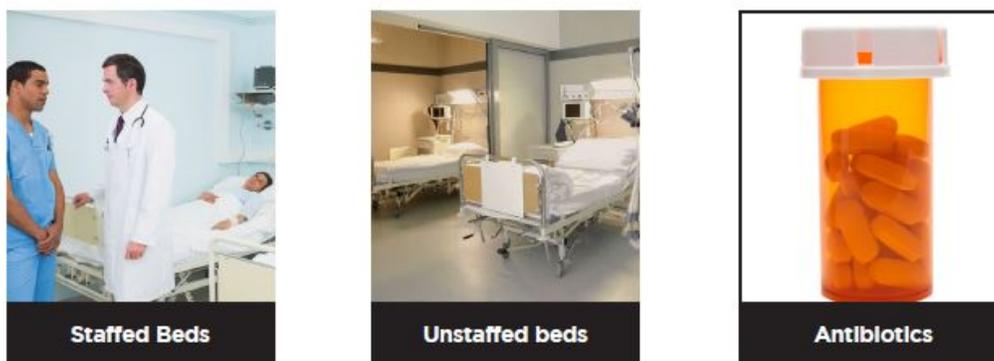


Figure 5. Example Resource Icons

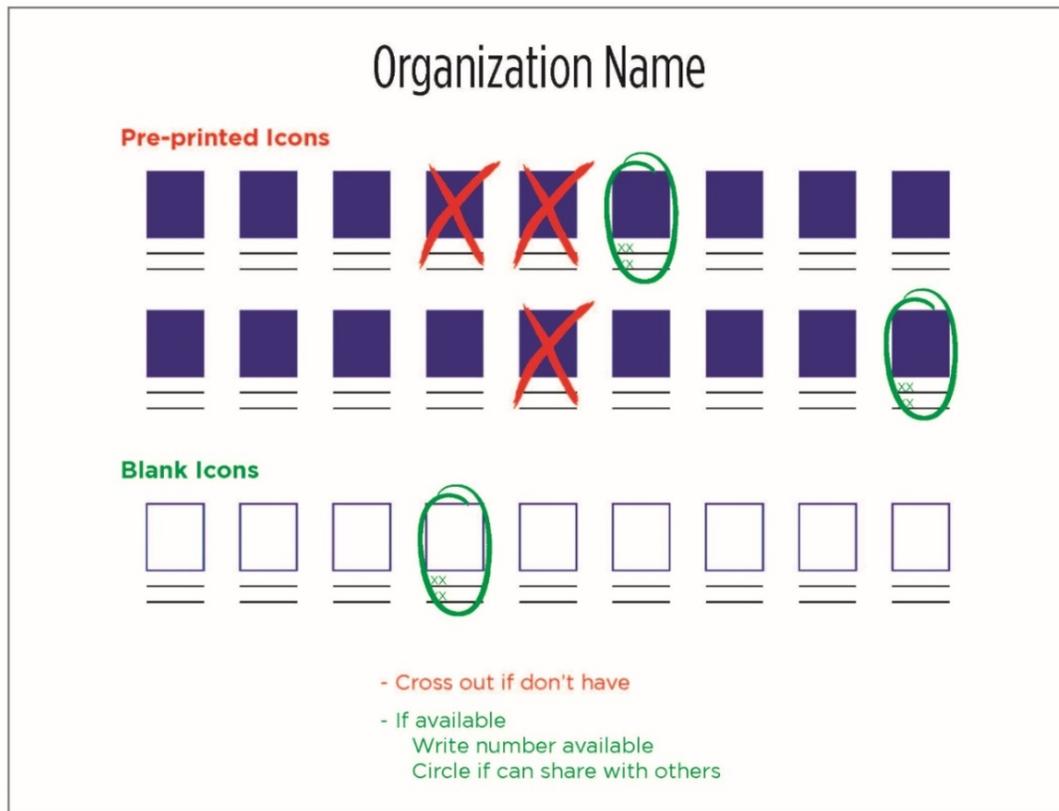


Figure 6. How to Fill Out the Resource Poster or Resource Worksheets

Print out the **Roles and Responsibilities Worksheet** and give organization representatives several copies. Ask them to list their roles and responsibilities and indicate whether those roles and responsibilities pertain to current (day-to-day or routine) operations or operations during a public health emergency (or both), by selecting the appropriate checkbox. Examples of how to fill out the worksheet are provided in Figure 7 below.

Role/Responsibility	Current or Public Health Emergency Operations
<p>Role/Responsibility: We operate the county emergency operations center (EOC).</p>	<p><input checked="" type="checkbox"/> Current <input checked="" type="checkbox"/> Public Health Emergency</p>
<p>Role/Responsibility: We provide nonmedical support and resources to health care facilities. We assist with administrative/office duties, such as answering</p>	<p><input checked="" type="checkbox"/> Current <input type="checkbox"/> Public Health Emergency</p>

Role/Responsibility	Current or Public Health Emergency Operations
telephones, keeping records, and reordering supplies.	
<p>Role/Responsibility: We provide health information to the public and other agencies.</p>	<p><input checked="" type="checkbox"/> Current <input checked="" type="checkbox"/> Public Health Emergency</p>
<p>Role/Responsibility: We will activate our closed point of dispensing (POD).</p>	<p><input type="checkbox"/> Current <input checked="" type="checkbox"/> Public Health Emergency</p>
<p>Role/Responsibility: We provide patient care. Our services include (please fill in, e.g., trauma/emergency care, pediatric care, surgery, laboratory diagnostics, and dialysis.) _____ _____ _____ _____</p>	<p><input checked="" type="checkbox"/> Current <input checked="" type="checkbox"/> Public Health Emergency</p>
<p>Role/Responsibility: We provide outpatient primary care.</p>	<p><input checked="" type="checkbox"/> Current <input checked="" type="checkbox"/> Public Health Emergency</p>
<p>Role/Responsibility: We will triage calls. Emergency calls will be dispatched to EMS and nonemergency calls will be routed to an information line.</p>	<p><input type="checkbox"/> Current <input checked="" type="checkbox"/> Public Health Emergency</p>

Figure 7. How to Fill Out the Roles and Responsibilities Worksheet

Electronic Version

The electronic version consists of two components:

- Microsoft Excel **Electronic Resource Workbook**
- **Electronic Resource Workbook Instructions for Organizations**

The **Electronic Resource Workbook** contains 10 individual spreadsheets: one for identifying roles and responsibilities, eight for identifying resources, and one for customizing resource drop-down choices. (More information about this last spreadsheet can be found in the **Electronic Resource Workbook Instructions for Organizations**.)

The electronic version provides more customization to the user than the paper version and offers the ability to create charts for visual representations of the available and shareable resources. In addition, the **Electronic Resource Workbook includes the following components.**

- Allows users to record more specific detail about a resource. For example, on the print version, X-Ray machine and X-Ray film are listed together as "X-Ray Machine and Film." On the electronic version, the two are listed separately under consumable and nonconsumable medical supplies, allowing the user to indicate differing amount of each (i.e., one X-Ray machine and a 24-hour supply of film).
- Lists several resources not included on the printable **Resource Poster** and **Resource Worksheets**. These additional resources were included to demonstrate the level of specificity that can be achieved with the electronic version and are indicated with an asterisk (*).
- Allows resources to be listed alphabetically; on both the printable **Resource Poster** and **Resource Worksheets**, resources are listed in the order previous communities found of most importance or benefit.

Resources in the **Electronic Resource Workbook** are separated into the following eight categories.

1. Medical Supplies - Consumable (e.g., antiviral medications)
2. Medical Supplies - Nonconsumable (e.g., wheelchairs)
3. Other Supplies - Consumable (e.g., food, water)
4. Other Supplies - Nonconsumable (e.g., bedding)
5. Communication and Technology
6. Transportation
7. Staff and Volunteers
8. Spaces and Places

Resources in the **Electronic Resource Workbook** are separated into medical and nonmedical as well as consumable and nonconsumable worksheets or "tabs" to help users better summarize and analyze

resources through the use of charts. Separating resources this way allows users to create manageable charts and pivot tables by ensuring consistency in the number ranges indicated. Users are able to modify these categories as needed to best suit their needs.

How to Use the Electronic Version

Prepare the **Electronic Resource Workbook** for your community's use by first looking at the resources listed in each column of the individual spreadsheets. You will be sending this file to multiple organizations for their input along with a copy of the **Electronic Resource Workbook Instructions for Organizations**.

Customize the Electronic Resource Workbook

Add any additional resources you are aware of in your community to each spreadsheet in column A. In addition, if you disagree with the assigned category for a particular resource (e.g., whether a resource is consumable or nonconsumable), move it to the appropriate tab.

Note: Each spreadsheet has two columns with drop-down menu choices for each resource: Column B and Column E. If you move any of the resources to different spreadsheets using the copy/paste function, you will need to update the drop-down choices for Column B in the new spreadsheet.

To make adjustments to the drop-down choices listed for a resource, navigate to the last worksheet in the **Electronic Resource Workbook**, labeled "Drop-Down Choices." Here, you will see four columns containing information that populates the drop-down fields within Columns B and E in each spreadsheet (see Figure 8 on the next page for an example). These drop-down choices are included to assist you with compiling and visualizing the data you receive from each organization by standardizing responses.

When looking at the "Drop-Down Choices" tab, please note the following:

- "Column B - Consumable Supplies" applies to both the "Medical Supplies - Consumable" and "Other Supplies - Consumable" spreadsheets (i.e., a change to the ranges in this column updates Column B in both spreadsheets)
- "Column B - Nonconsumable Supplies" applies to both the "Medical Supplies - Nonconsumable" and "Other Supplies - Nonconsumable" spreadsheets (i.e., a change to the ranges in this column updates Column B in both spreadsheets)
- "Column B – Communication/Transportation/Staff/Spaces" applies to the "Communications & Technology," "Transportation," "Staff & Volunteers," and "Spaces & Places" spreadsheets (i.e., a change to the ranges in this column updates Column B in all of these spreadsheets)
- "Column E - Potential to Share" applies to all spreadsheets (i.e., a change to the ranges in this column updates Column E in all spreadsheets).

A	B	C	D
Column B - Consumable Supplies	Column B - Nonconsumable Supplies	Column B - Communication/Transportation/Staff/Space	Column E - Potential to Share
No, do not have this resource	None	None	Yes
Yes, at least a 24-hour supply	Yes, less than 5	Yes, 1	No
Yes, less than a 24-hour supply	Yes, between 5 and 10	Yes, between 1 and 5	Maybe
Yes, other	Yes, between 10 and 20	Yes, between 5 and 10	
	Yes, more than 20	Yes, more than 10	

Figure 8. Example Drop Down Choices

You can change these drop-down fields by editing the text to tailor the ranges for your community. For example, if your community is large, you may choose to start your range for Column B in the "Communication/Transportation/Staff/Spaces" spreadsheets with, "Yes, 10" instead of "Yes, 1." Simply type in your new ranges and the drop-down menus in each spreadsheet will automatically change.

To add additional fields to the drop-down choices, enter text in the blank cells at the bottom of the table. If you add additional choices, you will need to update the data validation source range in each spreadsheet. Microsoft's website provides user-friendly instructions for doing this update³.

Get Organizational Input

Once you have prepared the **Electronic Resource Workbook**, you are ready to send it, along with the **Electronic Resource Workbook Instructions for Organizations**, to each organization from which you want information. Ask each organization to fill out the entire **Electronic Resource Workbook** and return it to the designated person by the date you request. Tailor your instructions to include this information:

"CDC-CHST and ORAU recommend allowing at least 3 weeks for organizations to complete and return their workbooks."

Note: You may want to hide the "Drop-Down Choices" spreadsheet to prevent organizations from editing the ranges you have provided. To hide the spreadsheet, right click on the tab at the bottom of the Workbook and select "hide." To unhide, right click on any tab in the **Electronic Resource Workbook**, select "unhide," and then select the "Drop-Down Choices" spreadsheet. More information can be found on Microsoft's website⁴.

After the organizations have returned their **Electronic Resource Workbooks**, you have the option to combine the individual **Electronic Resource Workbooks** into a master community **Electronic Resource Workbook**. Combining them will allow you to analyze the information and create visual representations with charts or dynamic PivotTables. This step is completely optional and may require advanced Excel skills. See the tutorials on Microsoft's website for information on combining multiple worksheets or workbooks⁵, creating charts⁶, and an overview of PivotTables.⁷

After Using This Tool

³ Instructions for creating a drop-down list can be found on Microsoft's website at <https://support.office.com/en-us/article/create-a-drop-down-list-7693307a-59ef-400a-b769-c5402dce407b> (last accessed March 6, 2019).

⁴ Instructions for hiding or showing worksheets can be found on Microsoft's website at <https://support.office.com/en-us/article/Hide-or-show-worksheets-or-workbooks-69f2701a-21f5-4186-87d7-341a8cf53344> (last accessed March 6, 2019).

⁵ Instructions for combining multiple worksheets or workbooks can be found on Microsoft's website at <https://support.office.com/en-us/article/consolidate-data-in-multiple-worksheets-007ce8f4-2fae-4fea-9ee5-a0b2c9e36d9b> (last accessed March 6, 2019).

⁶ Instructions for creating charts can be found on Microsoft's website at <https://support.office.com/en-us/article/Create-a-chart-from-start-to-finish-0baf399e-dd61-4e18-8a73-b3fd5d5680c2> (last accessed March 6, 2019).

⁷ An overview of PivotTables can be found on Microsoft's website at <https://support.office.com/en-us/article/Overview-of-PivotTables-and-PivotCharts-527c8fa3-02c0-445a-a2db-7794676bce96> (last accessed March 6, 2019).

CDC-CHST and ORAU recommend providing the results (or a summary) of the information collected from using *Space, Staff, Stuff* to all participating community organizations, either in person or electronically. In addition, prior communities that have used *Space, Staff, Stuff* have reported benefits to regularly updating their community organizations' roles, responsibilities, and resources as part of their all-hazards planning efforts.

As mentioned, CDC-CHST has additional planning resources available on their website that may be of use to your community. Two tools that may be of particular interest include the *Community Assessment Tool for Public Health Emergencies* and the *Community Planning Framework for Healthcare Preparedness*.⁸

Finally, CDC-CHST would appreciate your feedback on this document. You may provide this feedback by sending it to healthcareprepared@cdc.gov.

⁸ The *Community Assessment Tool* and the *Community Planning Framework* can be downloaded from CDC-CHST's website at <https://www.cdc.gov/cpr/readiness/healthcare/communities.htm> (last accessed March 6, 2019).